

REMARKS

This communication is in response to the non-final Office Action issued October 14, 2003. The Examiner rejected claims 1-5, 17-19, 22, 23, and 26 under 35 U.S.C. § 102 in view of one of U.S. Patent Nos. 5,952,415 to Hwang (Hwang) and 5,006,297 to Brown *et al.* (Brown). The Examiner rejected claims 6-16, 20, 21, 24, 25, and 27-36 under 35 U.S.C. § 103 in view of one or more of Hwang and Brown.

Revocation and Power of Attorney

The Applicants submitted a Revocation and Power of Attorney on March 27, 2002 indicating a change in representation and attorney docket number for this application. Another copy of the Revocation and Power of Attorney is included with this Response. The Applicants respectfully request that the Revocation and Power of Attorney be entered and that the mailing address and attorney docket number be updated accordingly.

Preliminary Amendment

The Applicant's Preliminary Amendment filed January 31, 2001 erroneously attempted to amend claim 13. This amendment should have been to claim 14. Claim 14 has been amended above to correct an obvious grammatical error.

Applicant-Initiated Amendments

The written description has been amended above to recite that the volumetric reduction of the golf ball subassembly is at least about 1%. Since this was included in claim 11 as originally filed, no new matter is added.

Claim Rejections Under 35 U.S.C. § 102

In sections 1-2 and 6-7 of the Office Action, the Examiner rejected claims 1-5, 17-19, 22, 23, and 26 under 35 U.S.C. § 102 in view of one of Hwang and Brown. Specifically, the Examiner rejected claims 1-5 in view of Hwang and claims 17-19, 22, 23, and 26 in view of Brown.

It is well settled that for a rejection of a claim under 35 U.S.C. § 102 to be proper, each and every element as set forth in the claim must be found in a single reference. See, for example, MPEP § 2131. For at least the reasons stated below, the Examiner's rejections of claims 1-5, 17-19, 22, 23, and 26 do not satisfy this burden.

Claims 1-5

Hwang appears to disclose golf balls having cores formed of a mixture of mixture of base resins, α,β -ethylenical unsaturated carboxylic acid, and fatty acid bismuth salt, in which the salt is present initially in amounts of 3-25 and 5-50 parts by weight respectively per 100 parts by weight of the base resins. The cores are formed by mixing the components together in liquid form at an elevated temperature and placing the mixture in a mold. The mold is cooled such that the mixture solidifies to form a solid core. As with virtually all compounds, the mixture decreases in volume as it cools from liquid form to solid form. See column 3, lines 11-43.

In contrast, the present application discloses and claims methods of making a golf ball that counteract the heat generated by forming the cover over the core. As discussed in the written description, heat generated by forming the cover is transferred to the core, or golf ball subassembly, resulting in a thermal expansion of the subassembly. This can result in an unplayable ball being formed.

To counteract the ill effects of this thermal expansion, the methods of the present application cool the subassembly such that it undergoes a volumetric reduction, and the cover is applied over the volumetrically reduced assembly. As this volumetric reduction is of the formed subassembly, it inherently is in addition to any volumetric reduction that occurs as a part of the core forming process. For purposes of clarification only, part of the “forming” recitation of claim 2 has been moved to claim 1. Since Hwang only discloses cooling the subassembly during its formation, Hwang does not disclose, or even suggest, that a formed golf ball subassembly be cooled such that it undergoes a volumetric reduction and a cover layer be applied thereon.

Thus, not all of the recitations of claims 1-5 are disclosed in Hwang, and, therefore, the rejections thereof must be withdrawn.

Claims 17-19, 22, 23, and 26

Brown discloses a method of casting a cover onto a golf ball core. Cores and flowable cover stock are prepared, and then placed within a mold. The covered cores are held at an initial temperature for a first period of time. The initial temperature is ambient (column 7, line 6), and the first period of time is 15 minutes (column 7, line 7). Optionally, the covered cores may be subjected to an intermediate curing at which they are held at a second temperature for a second time. The second time may be either ½ hour or 3 ½ hours (column 7, lines 18-19), and the temperature is again ambient (column 5, lines 4-5). Finally, the covered cores are subjected to a compression molding step to impart a dimple pattern thereon. The compression molding step lasts two minutes and is at 195°F (column 7, lines 21-31). Thus, it is seen that Brown discloses placing a covered core in a mold and holding it there

from between 15 minutes to 3 ¾ hours at ambient temperature, and then heating the covered core to 195°F for 2 minutes to compression mold dimples into the cover.

In contrast, the present application discloses and claims maintaining a covered golf ball subassembly at a first temperature for a first period of time, at a second temperature for a second period of time, and at a third temperature for a third period of time.

In his rejection, the Examiner stated “Brown et al teach the claimed process as evident at col 5, lns 22-26; col 6, lns 56-58; col 7, lns 1-7 and 20-25; and figs 1-2.” The Examiner’s statement is respectfully traversed. The Examiner’s first citation (column 5, lines 22-26) refers to the compression molding step mentioned above. The Examiner’s second citation (column 6, lines 56-58) refers to the preparation of the flowable cover stock before it is placed on the core. However, since step a) of claim 17 requires “providing a *covered golf ball subassembly* in two mold halves” (emphasis added), the Examiner’s second citation is inapplicable. The Examiner’s third citation (column 7, lines 1-7) refers to the cover preparation, which is inapplicable, and the initial temperature mentioned above. The Examiner’s fourth citation (column 7, lines 20-25) refers again to the compression molding step mentioned in the Examiner’s first citation. Finally, the Examiner’s fifth citation (figures 1 and 2) simply show side views of a fixed-pin mold in open and closed positions, respectively. Thus, the Examiner has failed to identify each of the recitations of claim 17.

The Examiner further states that:

The step of heating the mold halves of Brown et al constitutes the claimed steps of maintaining the mold halves at a first temperature for a first predetermined time, heating the mold halves to a second temperature greater [than] the first predetermined temperature for a second predetermined time, and maintaining the mold halves at a third temperature for a third predetermined time. As the temperature of the mold halves increases from

being heated, it is inherent that the temperature of the mold halves are maintained, even for the slightest amount of time, at numerous temperatures.

Again, the Examiner's statement is respectfully traversed. First, as previously discussed, there is no disclosure of a method of curing a golf ball cover that includes maintaining the mold halves at a third temperature for a third predetermined time. Second, while the mold parts are being heated, they are *not* maintained at any intermediate temperature, and certainly not for any predetermined amount of time. Is the Examiner suggesting that the method of Brown contemplates holding the covered core at unspecified infinite temperatures between ambient and 195°F for unspecified yet predetermined amounts of time? This is an unrealistic and unfounded interpretation. The definition of *maintaining* that the Examiner is attempting to assign is against the well known meaning in the art and is unsupported by the Brown reference or any other source.

Thus, not all of the recitations of claims 17-19, 22, 23, and 26 are disclosed in Brown, and, therefore, the rejections thereof are improper and must be withdrawn.

Conclusion of § 102 Rejections

In view of the foregoing, the Examiner's rejections under 35 U.S.C. § 102 to claims 1-5, 17-19, 22, 23, and 26 are believed to be overcome.

Claim Rejections Under 35 U.S.C. § 103

In sections 3-5 and 8-9 of the Office Action, the Examiner rejected claims 6-16, 20, 21, 24, 25, and 27-36 under 35 U.S.C. § 103 in view of one or more of Hwang and Brown. Specifically, the Examiner rejected claims 6-13 in view of Hwang, claims 14-16 and 31-36 in view of Hwang modified by Brown, and claims 20, 21, 24, 25, and 27-30 in view of Brown.

It is well settled that for a rejection of a claim under 35 U.S.C. § 103 to be proper, each and every recitation of the claim must be present in the cited reference(s). See, for example, MPEP § 2143.03. It is also well settled that for a rejection of a claim under 35 U.S.C. § 103 to be proper, there must be some suggestion or motivation to modify a reference or combine reference teachings. See, for example, MPEP § 2143.01. When so modifying a reference, the proposed modification cannot render the prior art unsatisfactory for its intended purpose or change the principle of operation of a reference. See, for example, MPEP § 2143.01. The modification must support a reasonable expectation of success with some degree of predictability. See, for example, MPEP § 2143.02. Finally, the source of the suggestion or motivation to modify a reference cannot be the Applicant's own disclosure. See, for example, MPEP § 2143. For at least the reasons stated below, the Examiner's rejections of claims 6-16, 20, 21, 24, 25, and 27-36 do not satisfy these burdens.

Claims 6-13

The Applicants respectfully traverse the Examiner's rejections of claims 6-16. As each of these claims is ultimately dependent upon claim 1, it is initially noted that each of these claims is allowable for at least the same reasons as claim 1.

Second, it is noted that the Examiner made several claims of obviousness while providing no rationale therefor. The Applicants agree that known molding processes include cooling steps. However, the cooling of golf ball subassemblies *prior to forming a cover thereon* and applying a cover layer on the *volumetrically reduced golf ball subassembly*, as disclosed and claimed in the present application, is *not* known in the art, let alone at the temperatures and for the durations specified in the claims. Nor would such a method have been obvious.

Thus, the rejections of claims 6-13 are improper and must be withdrawn.

Claims 14-16

The Examiner's rejections are respectfully traversed. Since each of claims 14-16 is ultimately dependent upon claim 1, each of these claims is allowable for at least the same reasons as claim 1.

Furthermore, regarding claim 16, there is no disclosure in the cited references, as discussed above, of maintaining the mold halves at a third temperature for a third predetermined time.

Thus, the rejections of claims 14-16 are improper and must be withdrawn.

Claims 20, 21, 24, 25, and 27-30

The Examiner's rejections are respectfully traversed. Since each of claims 20, 21, 24, 25, and 27-30 is ultimately dependent upon claim 17, each of these claims is allowable for at least the same reasons as claim 17. It is further noted that the Examiner's numerous claims of obviousness are unsupported. Thus, the rejections of claims 20, 21, 24, 25, and 27-30 are improper and must be withdrawn.

Claims 31-36

The Examiner's rejections are respectfully traversed. Since each of claims 31-36 is ultimately dependent upon claim 17, each of these claims is allowable for at least the same reasons as claim 17. It is further noted that the Examiner's numerous claims of obviousness are unsupported. Thus, the rejections of claims 31-36 are improper and must be withdrawn.

Conclusion of § 103 Rejections

In view of the foregoing, the Examiner's rejections under 35 U.S.C. § 102 to claims 6-16, 20, 21, 24, 25, and 27-36 are believed to be overcome.

Additional Fees

While no fee is believed due in conjunction with this Response, the Commissioner is hereby authorized to charge any insufficiency or credit any overpayment associated with this application to Swidler Berlin Shereff Friedman, LLP Deposit Account No. 19-5127 (order no. 20002.0062).

Conclusion

Claims 1 and 14 have been amended. Claims 1-36 are pending in the application, and are believed to be in condition for allowance. In view of the foregoing, all of the Examiner's rejections of the claims are believed to be overcome. The Applicant respectfully requests reconsideration and issuance of a Notice of Allowance for all claims. Should the Examiner feel further communication would help prosecution, the Examiner is urged to call the undersigned at the telephone number provided below.

Respectfully Submitted,



Sean P. O'Hanlon
Reg. No. 47,252

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Swidler Berlin Shereff Friedman, LLP
3000 K Street, NW
Suite 300
Washington, DC 20007
(202) 295-8429